

A-03070 FIGS. 1-16

FIG. 1

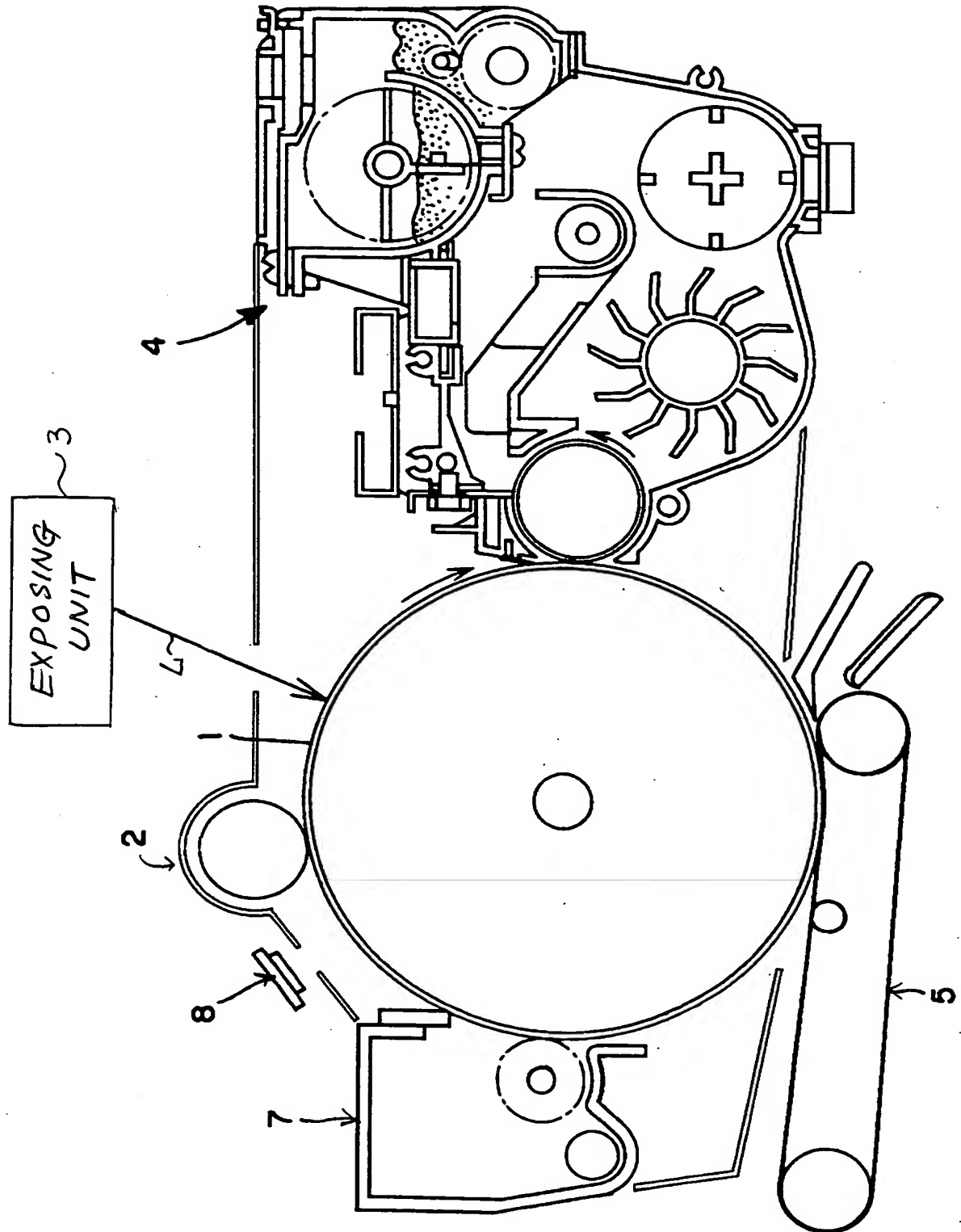


FIG. 2

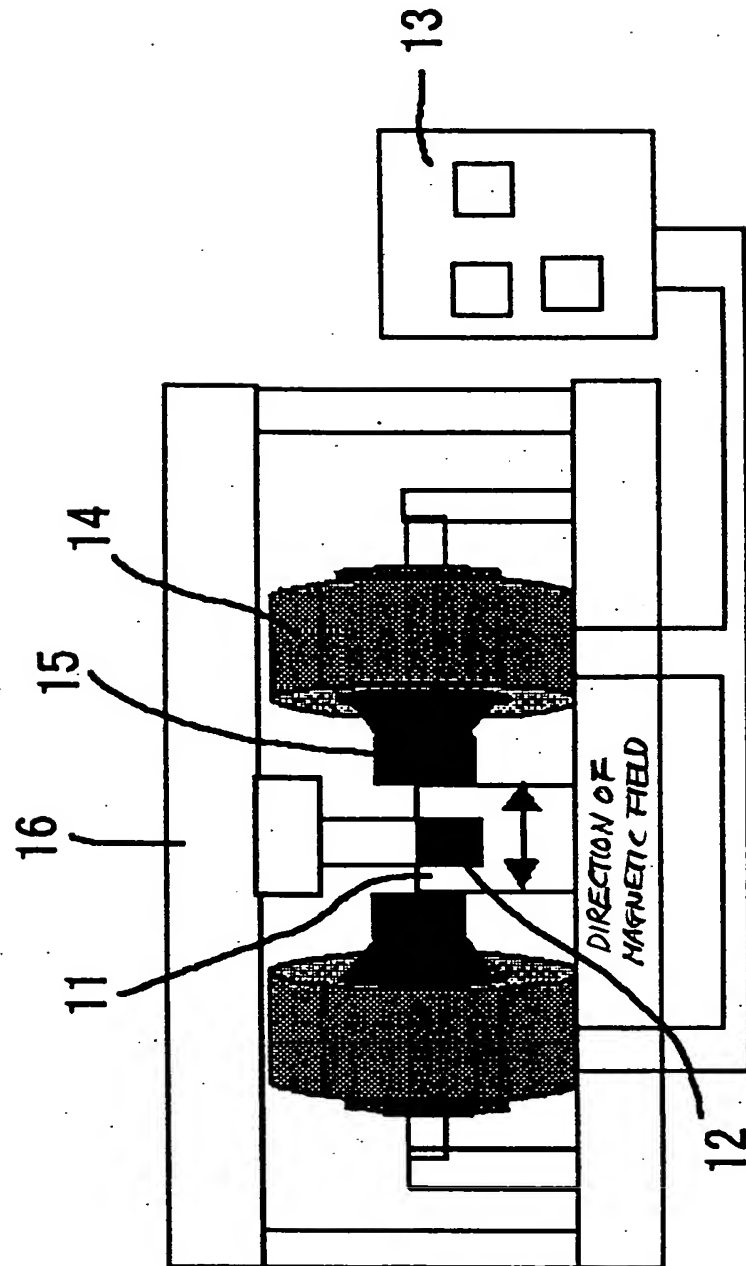


FIG. 3

w t %	STOPPING	STRENGTH (BENDING STRENGTH)	BREAKAGE	TOTAL
0.08	OCCURRED	12.0 kg/mm ²	NOT OCCURRED	X
0.1	OCCURRED	11.0 kg/mm ²	NOT OCCURRED	X
0.3	NOT OCCURRED	10.4 kg/mm ²	NOT OCCURRED	O
0.5	NOT OCCURRED	8.5 kg/mm ²	NOT OCCURRED	O
0.8	NOT OCCURRED	7.0 kg/mm ²	NOT OCCURRED	O
1.0	NOT OCCURRED	5.0 kg/mm ²	OCCURRED	X

FIG. 4

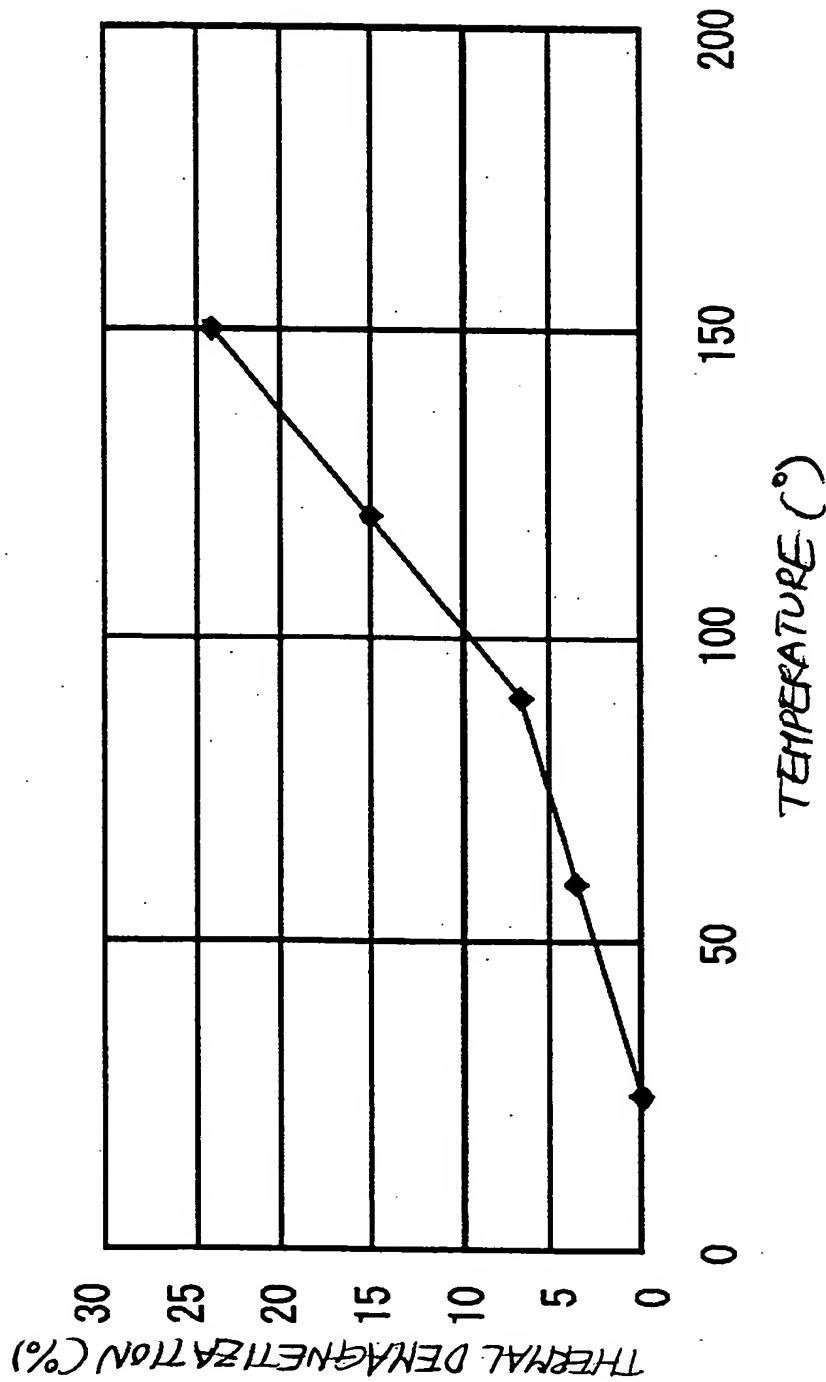


FIG. 5A

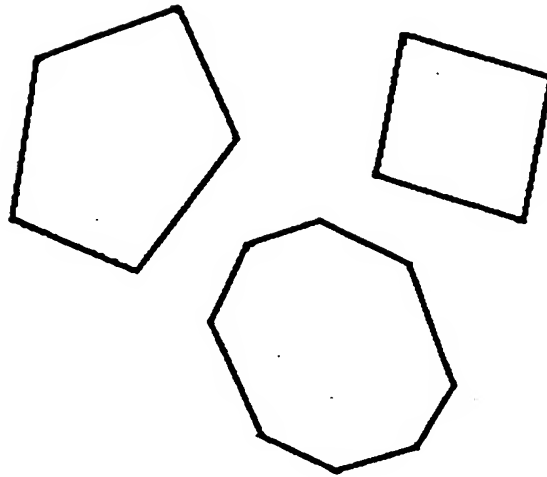
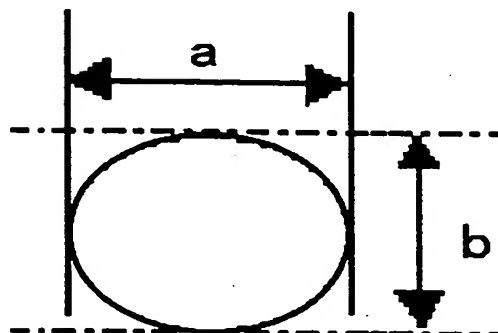


FIG. 5B



$$\text{CIRCULARITY} = b/a$$

FIG. 6A

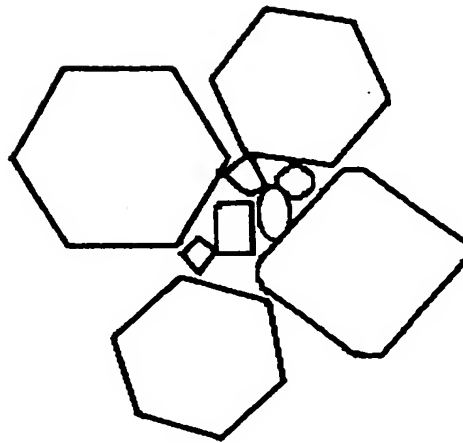
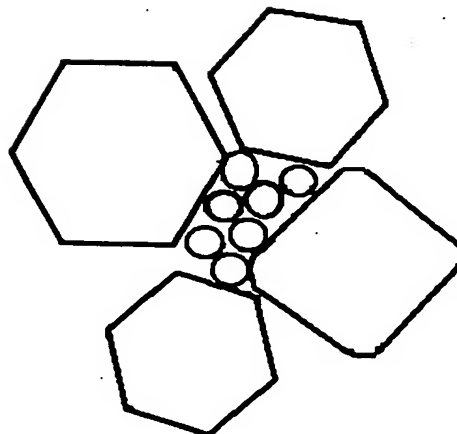


FIG. 6B



GRAINS WITH CIRCULARITY
OF 0.9 OR ABOVE

FIG. 7
DIFFERENT HOLDING METHODS FOR EPOXY
COMPOUND ANISOTROPIC Nd-Fe-B MAGNET

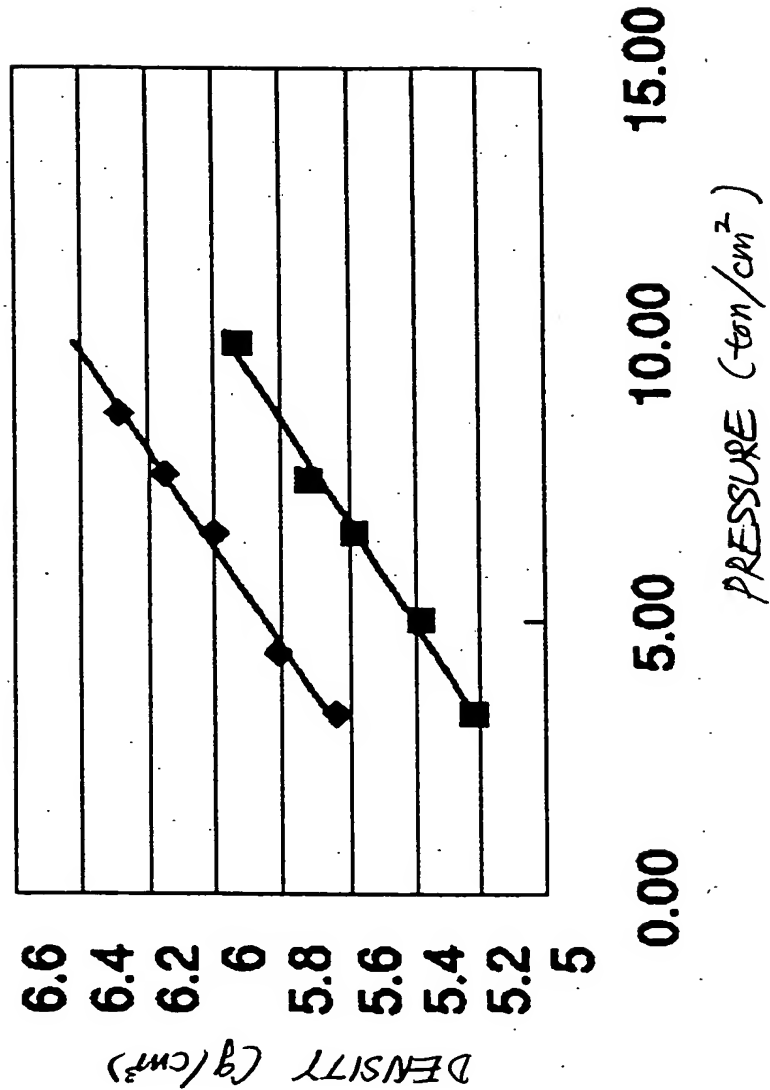


FIG. 8

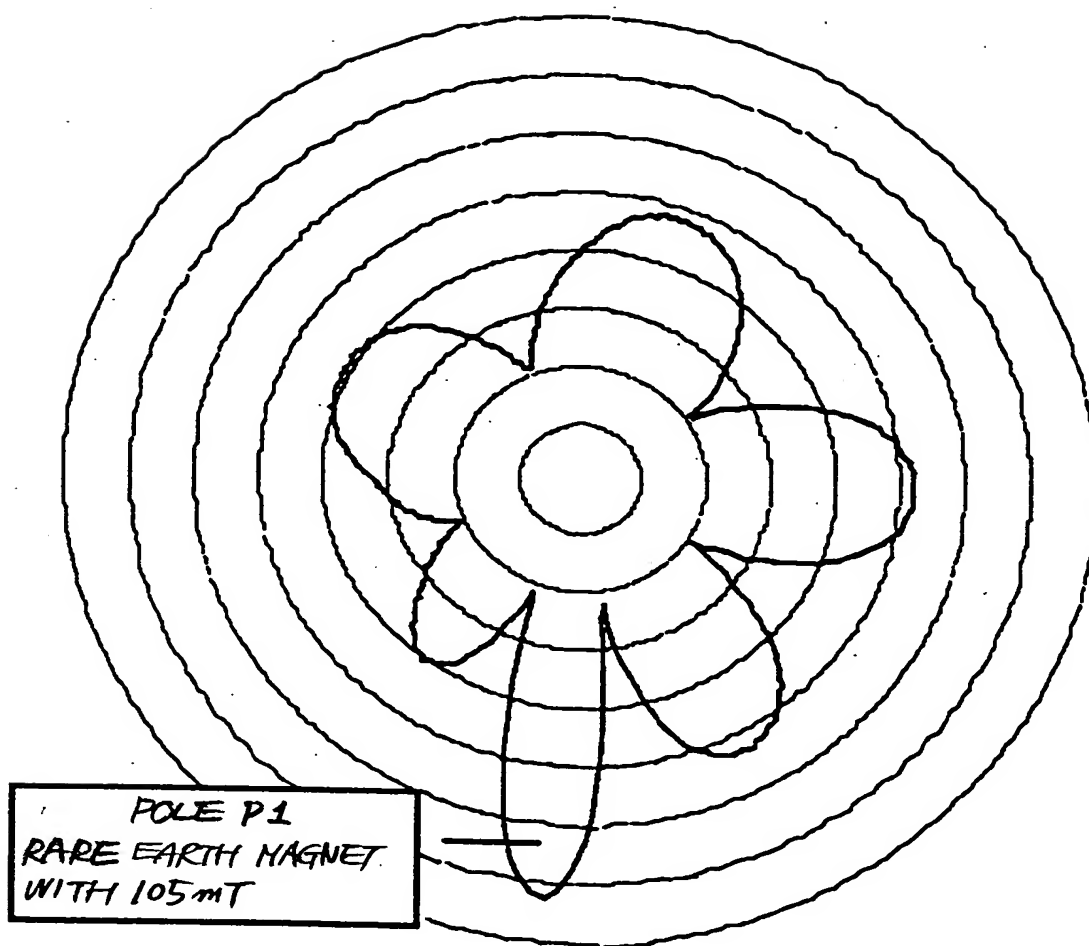


FIG. 9

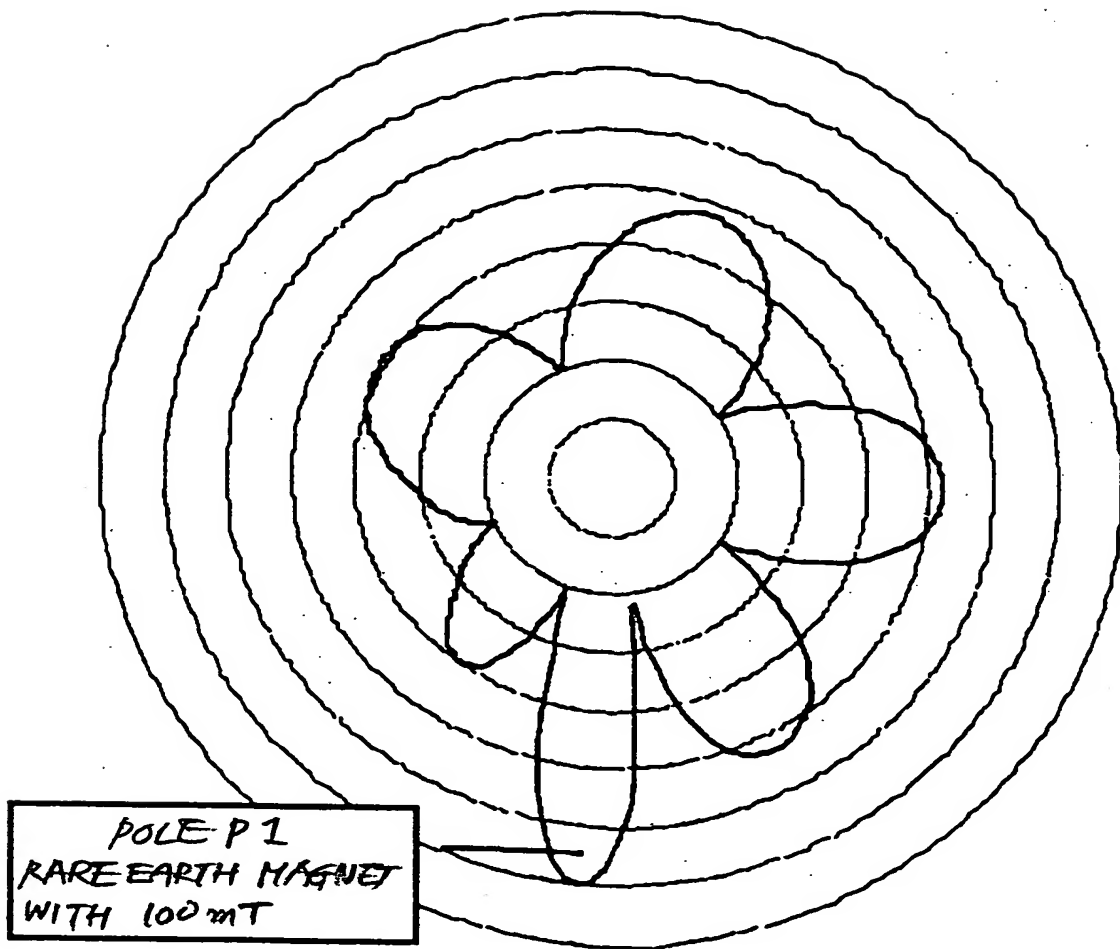


FIG. 10

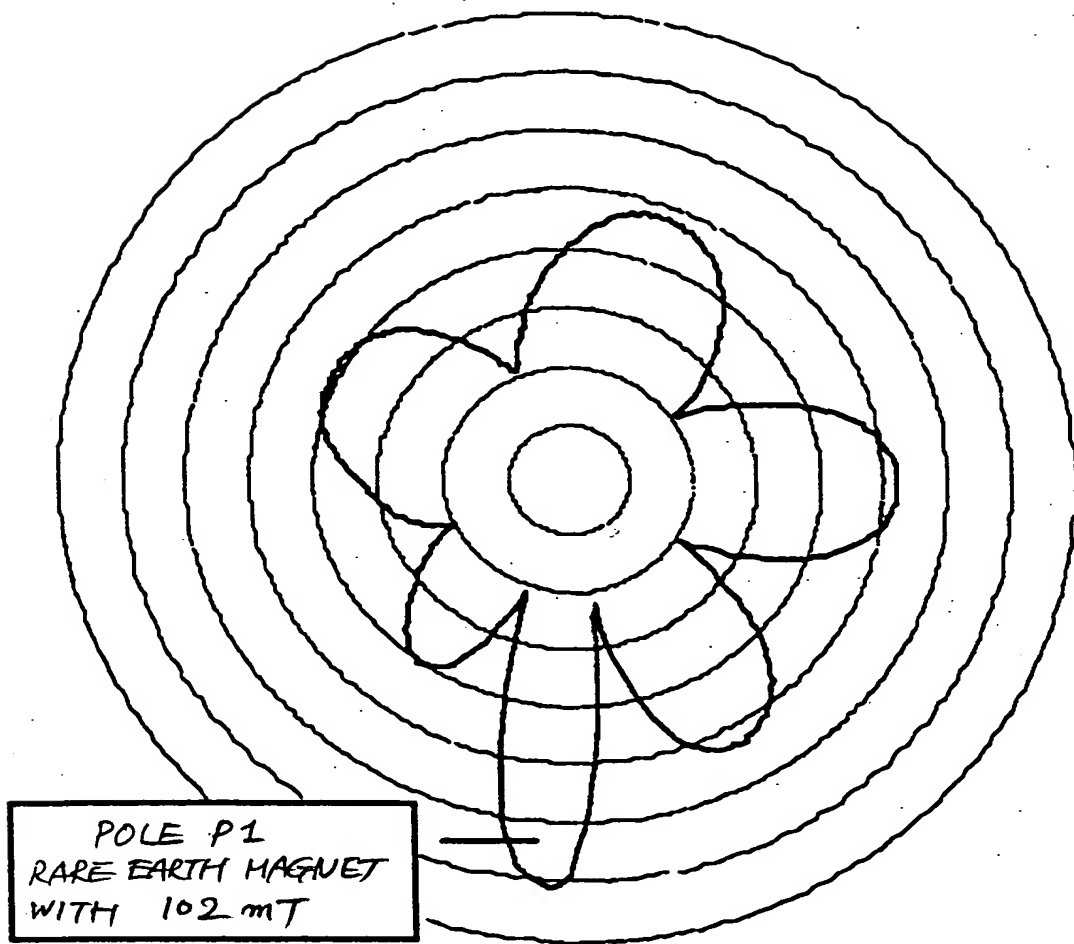


FIG. 11

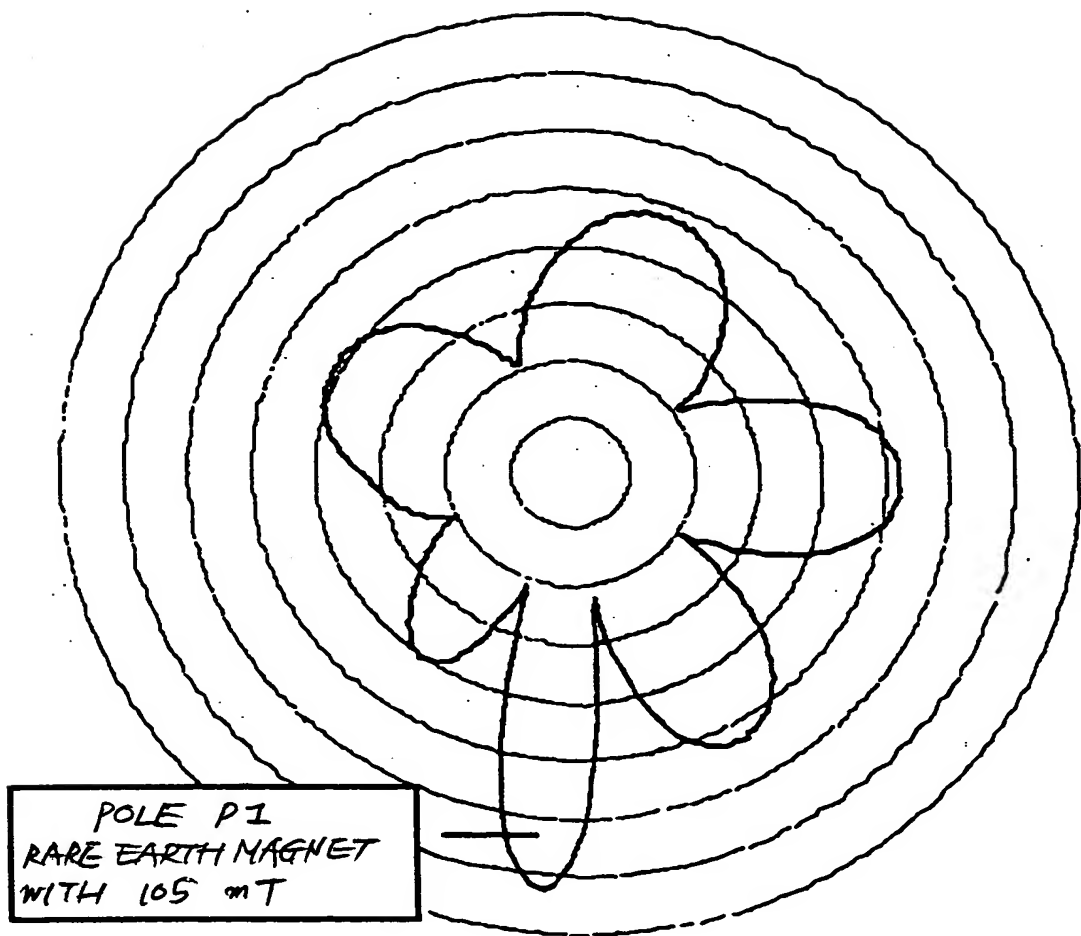


FIG. 12

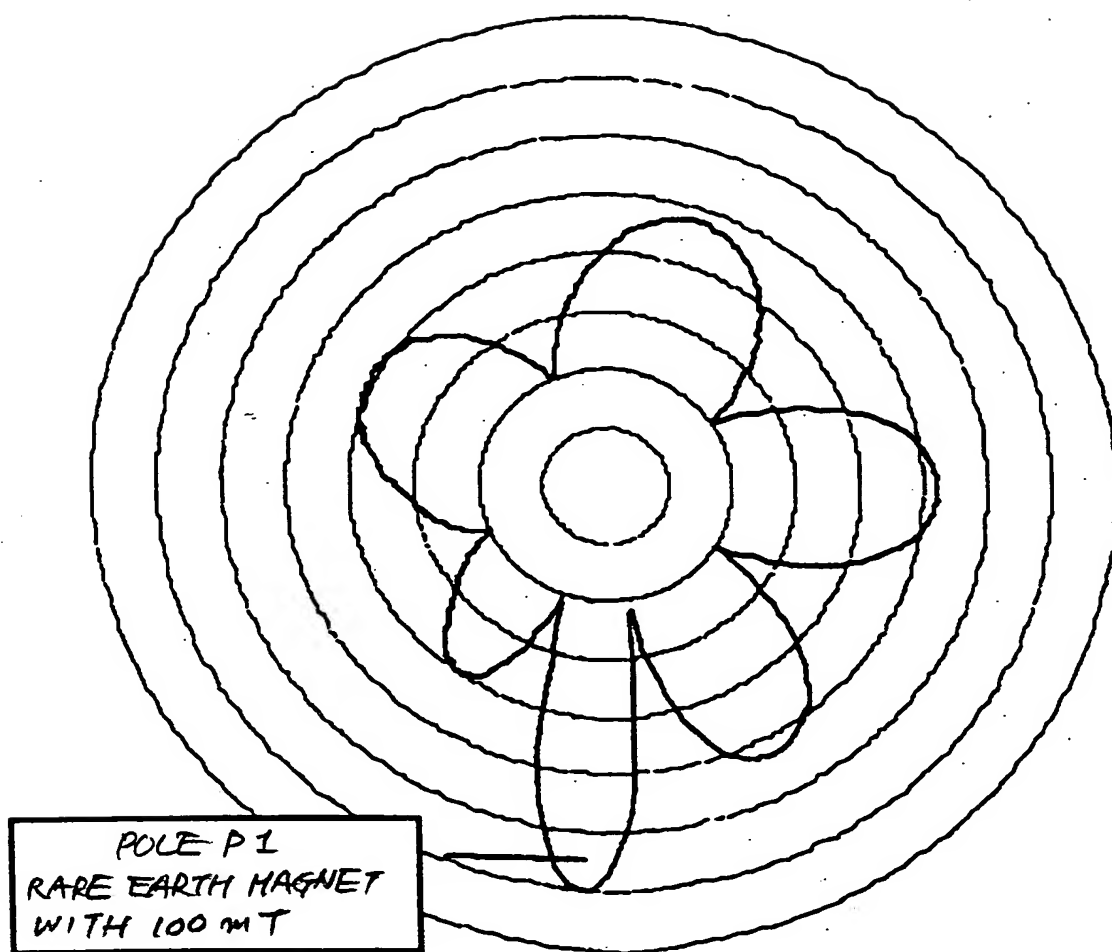


FIG. 13

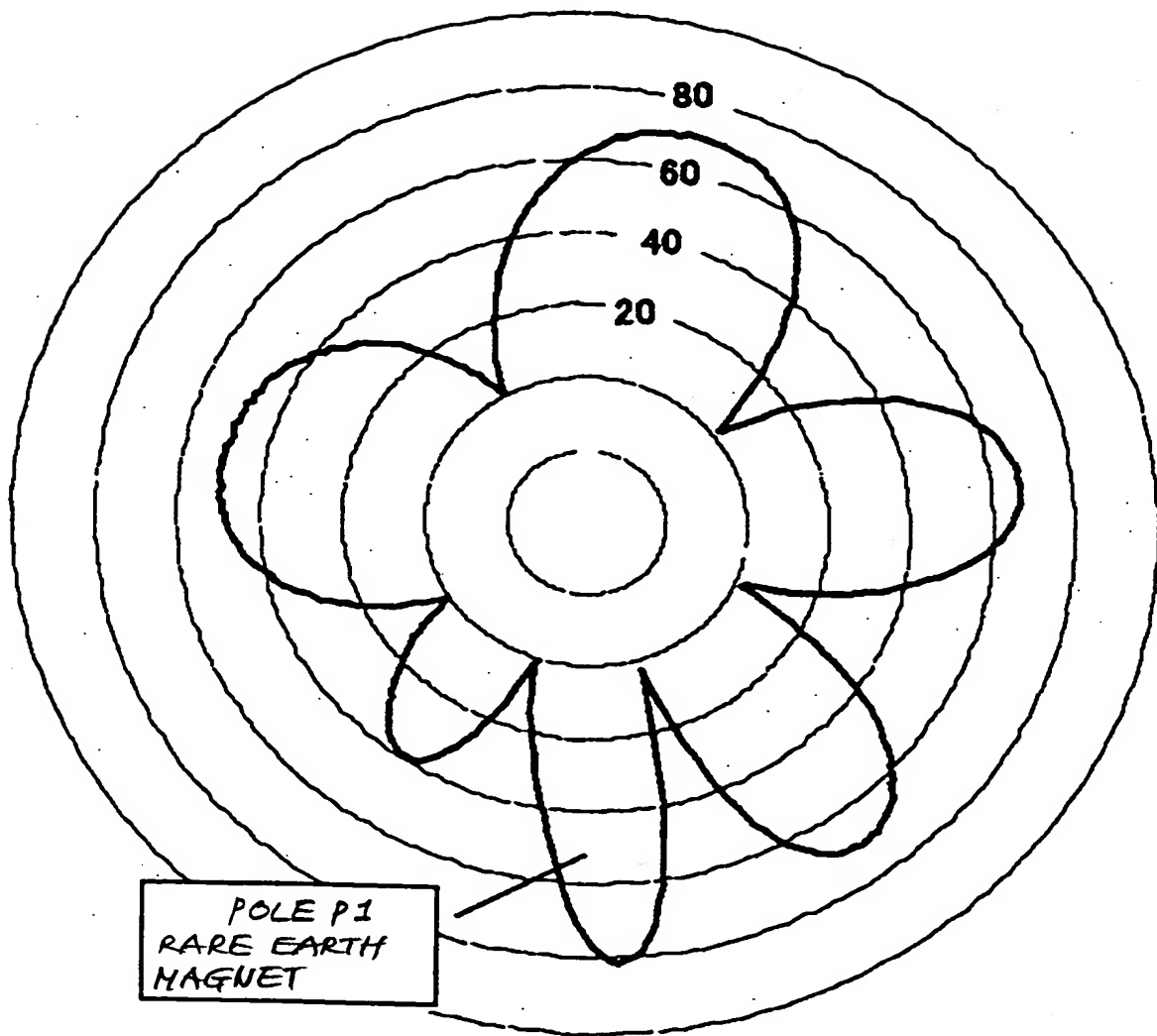


FIG. 14

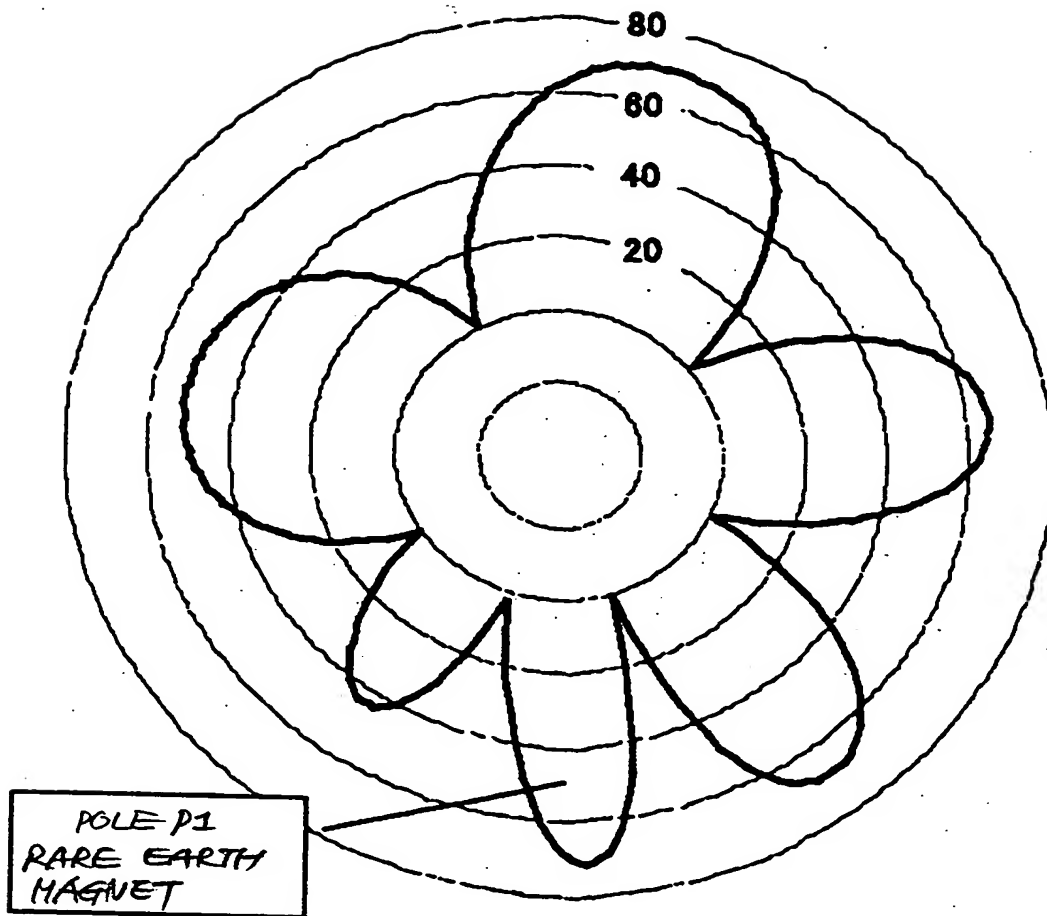


FIG. 15

MATERIAL				MOLDING CONDITIONS			CHARACTERISTICS		
MAGNETIC MATERIAL	BINDER MATERIAL	BINDER CONTENT (wt%)	MAGNETIC FIELD (Oe)	PRESSURE (ton/cm ²)	BAKING CONDITIONS	DENSITY (g/cm ³)	MAGNETIC FORCE/BH _{max} (mGOe)	DENSITY (g/cm ³)	STRENGTH (kg/mm ²)
PRIOR ART	ANISO. Nd-Fe-B	7.0	13,000	5.5	150°C60	5.0	10.2	5.0	7.0
	ANISO. Nd-Fe-B	7.0	13,000	7.5	150°C60	5.4	11.7	5.4	7.3
	ANISO. Nd-Fe-B	7.0	13,000	10.5	150°C60	5.9	13.1	5.9	7.8
	ANISO. Nd-Fe-B	7.0	13,000	5.5	100°C30	5.1	11.1	5.1	3.4
	ANISO. Nd-Fe-B	7.0	13,000	7.5	100°C30	5.5	12.2	5.5	3.6
	ANISO. Nd-Fe-B	7.0	13,000	10.5	100°C30	5.9	13.6	5.9	3.8
INVENTION	ANISO. Nd-Fe-B	7.0	13,000	5.5	100°C30	5.4	13.0	5.4	3.3
	ANISO. Nd-Fe-B	7.0	13,000	5.5	100°C30	5.4	13.1	5.4	3.3
	ANISO. Nd-Fe-B	7.0	13,000	7.5	100°C30	5.8	14.9	5.8	3.5
	ANISO. Nd-Fe-B	7.0	13,000	10.5	100°C30	6.1	16.3	6.1	3.8

FIG. 16

$(BH)_{max}$ VARIATIONS CAUSED BY DIFFERENT BINDERS

